TESTIMONY OF DR. MARTIN KUSHLER,
AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY (ACEEE)
Regarding Senate substitute bills SB 437 and SB 438
April 28, 2016

Good afternoon, Mr. Chairman…members of the Committee. Thank-you for the opportunity to speak with you today, on this very important subject.

In opening the hearings for these most recent substitutes for SB437 and SB438, Chairman Nofs stated:

"*Our responsibility is to assure resource adequacy. Not to do so would be irresponsible.*"

I agree completely.

I also heard mention of the over-arching goal of "*affordable, reliable energy for Michigan customers*", and the urgency of addressing Michigan's energy policy, given the numerous recent generating plant retirements.

Again, these are excellent points.

In this context… given that energy efficiency has proven itself to be by far the lowest-cost electricity resource available for the electric system… Michigan's policy for achieving energy efficiency is critically important. Indeed, to not have a strong policy for energy efficiency would be irresponsible.

Michigan has in place what, by all objective measures, is a very successful policy for utility energy efficiency programs….called "Energy Optimization".

Unfortunately, the current version of SB438 calls for the termination of that policy for electric utilities.

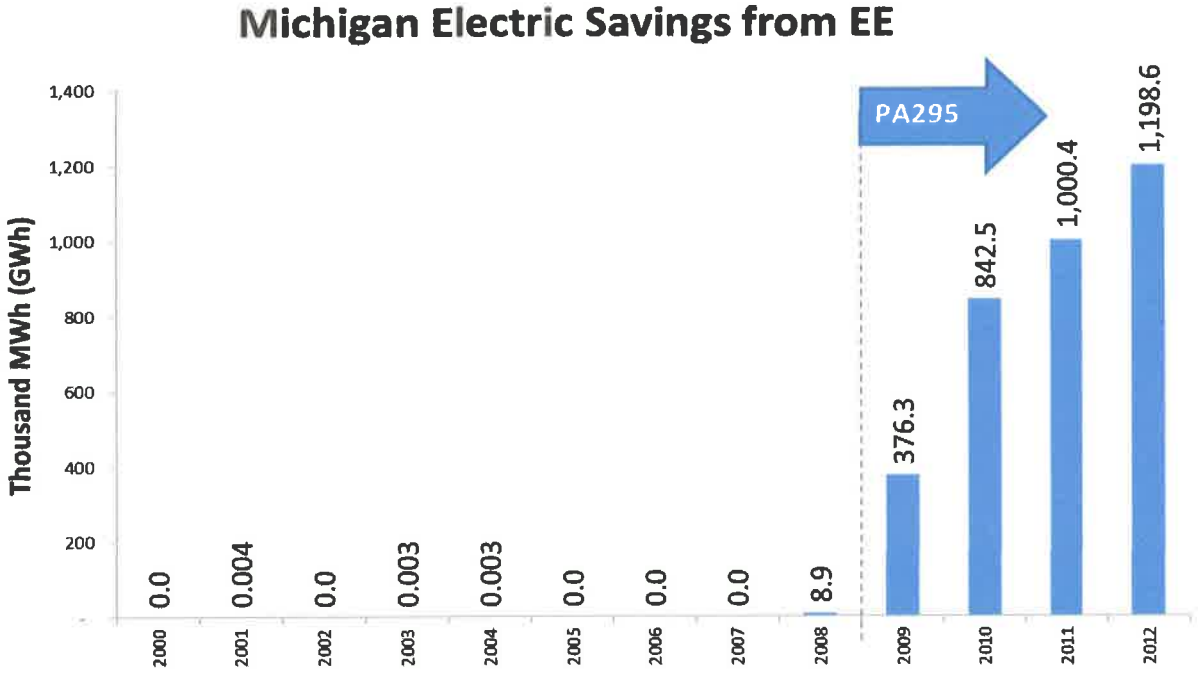
Good governance….and common sense…. would say that any move to eliminate an existing policy should answer two fundamental questions:

1. How well is the current policy working? And
2. Can the recommended new policy be expected to be more effective?

I will now briefly answer those two questions, with regard to the current Energy Optimization policy and the suggested replacement in the two bills being considered (SB438 and SB437)

1. How well is the current policy (Energy Optimization, under PA295) working?

For more than a decade prior to PA 295 in 2008, Michigan's electric utilities were essentially providing no energy efficiency programs for their customers, and achieving virtually no electricity savings.



Sources
2000-2007: Form EIA-861
2008: ACEEE Scorecard 2010
2009-2012: MPSC PA295 Annual Reports
[Graph by MEEA]

Following the passage of PA295, and under the requirements therein, Michigan's electric utilities have been very successful achieving large amounts of energy efficiency savings. These savings have been extremely cost-effective.

Data on the Success of Energy Optimization

- The utilities have exceeded the EO electricity savings targets every single year (most recently, saving 1.3% of sales in 2014)
- The **EO programs have produced cost savings of $4.38 for every dollar spent on the programs***
- EO is by far the least-cost utility system resource**
  - **Energy efficiency costs 2 cents/kWh....**
    - vs. 13.3 cents/kWh for a new coal plant
    - vs. 6.4 cents/kWh for a new combined cycle gas plant
    - vs. 6.4 cents/kWh average of all power supply costs

* *2015 Report on Energy Optimization Programs and Cost-effectiveness*, Michigan Public Service Commission, September 30, 2015.

***Report on the Implementation of the P.A. 295 Renewable Energy Standard and the Cost-Effectiveness of the Energy Standards,* MPSC, February 13, 2015.

By all objective measures, Michigan's current utility energy efficiency policy ("Energy Optimization", under PA295) is extremely successful.

This would seem to place a major 'burden of proof' on anyone proposing to terminate that policy and replace it with something else.

The combination of the current SB438 and SB437 terminates the existing Energy Optimization policy after 2018, and apparently replaces it with an "integrated resource planning" (IRP) approach thereafter. This raises the second fundamental question:

2. Can the recommended new policy be expected to be more effective than the current policy?

There is substantial national evidence to indicate that it would not be as effective, and in fact, would be much less effective.

First, we know from national data that states with an "energy efficiency resource standard" (EERS).... like Michigan's Energy Optimization standard.... save nearly 4 times as much energy as state that do not have an EERS policy.

NATIONAL DATA OVERWHELMINGLY SHOW THAT ENERGY EFFICIENCY RESOURCE STANDARDS (EERS) - - LIKE MICHIGAN'S EO - - ARE EXTREMELY EFFECTIVE

(e.g., produce nearly 4X the savings.... 2013 national data below)

	EE spending as a % of Revenues	EE savings as a % of Sales
States with EERS (n=26)	2.63	1.11
States w/o EERS (n=24)	0.76	0.30
	(p<.001)	(p<.001)

15

Moreover, we know that adding an IRP requirement to a state that does not have an EERS makes virtually no difference, as the next table clearly documents.

"INTEGRATED RESOURCE PLANNING" (IRP) IS NOT A SUITABLE *REPLACEMENT* FOR AN ENERGY EFFICIENCY STANDARD*

	EE spending as a % of Revenues	EE savings as a % of Sales
States with EERS (n=26)	2.63	1.11
States w/o EERS (n=24)	0.76	0.30
	(p<.001)	(p<.001)
States with IRP but no EERS (n=18)	0.76	0.34

...save less than a third of states with an EERS

*[Note: ***combining*** an IRP with an EERS can be effective]

Some have argued that adding an incentive for the utility to achieve energy efficiency to an IRP policy solves the problem. Again, the data suggest otherwise.

ADDING A UTILITY INCENTIVE POLICY TO AN IRP POLICY DOES NOT SOLVE THE PROBLEM

	EE spending as % of revenues	EE savings as % of sales
States w/ IRP but no EERS(n=18)	0.76	0.34
States w/ IRP & incentives but no EERS (n=8)	0.71	0.34
States with EERS (n=26)	2.63	1.11
Michigan	2.00	1.30

There are many practical reasons why an "IRP-only" approach fails to produce significant energy efficiency results, which I would be happy to discuss with the committee. I have first-hand experience with this from my decade of work at the Michigan Public Service Commission, and from work in numerous other states.

The only additional information I would offer today on this subject is that we have a very pertinent….and disturbing… example from just south of our border. At the end of 2014, Indiana became the first and only state to repeal its EERS policy, and went forward with an IRP-only approach. By the very next year, energy efficiency savings by their electric utilities fell to half of what they would have been under the prior EERS standard.

So to summarize, the existing Energy Optimization policy in Michigan is working extremely well, and all the available evidence indicates that the proposed new policy (i.e., replacing the EO policy and savings standard with an IRP process) would be much less effective.

Adding an IRP Process to an EERS Can be a Good Policy

For those who like the concept of integrated resource planning, the data do suggest that some of the best states for utility energy efficiency achievement do ***add*** an IRP policy to their EERS policy. The EERS establishes a minimum acceptable amount of energy efficiency that everyone can count on, and IRP is used to examine the potential for additional savings beyond the standard.

Of course, if a state is going to have an IRP process, it should be very well constructed. In previous testimony before this committee on September 24, 2015 I detailed many specific elements of the IRP process described in SB 437 that needed important improvements. I would be happy to provide those details again if the prior testimony was not retained. For today, I would just like to focus on one crucial aspect:

No-where in the current SB437 sections regarding IRP is it ever stated that the IRP must actually examine the potential for energy efficiency to displace or delay the need for other resource options being considered. Rather, the text merely requires the utility to describe whatever they have planned for energy efficiency ("Details regarding the utility's plan to eliminate energy waste…"). A utility's "plan" could conceivably be little or no energy efficiency, in which case, little or no energy efficiency would be examined in the IRP.

In contrast, the existing process for a "Certificate of Need" (Section 6s) contains very appropriate language for what is required in an IRP filed in connection with a request for a certificate of need:

"(f) An analysis of the availability and costs of other electric resources that could defer, displace, or partially displace the proposed generation facility or purchased power agreement, including additional renewable energy, energy efficiency programs, load management, and demand response, beyond those amounts contained in subdivisions (c) to (e)." [Sec. 6s (11)(f)]

Unfortunately, that section addressing the certificate of need process is rendered inoperative after December 31, 2018 in the current SB437.
The essence of that paragraph (f) above should be incorporated into the required elements of an IRP laid out in SB437.

Additional Practical Problems with SB438

Even if one accepted the objective of ending the energy efficiency "mandate" in PA295, the current SB438 goes way beyond that objective, and essentially takes a 'meat-ax' to the whole concept of energy efficiency. If one simply wanted to phase out the "mandate", that could be done entirely within Section 77, where the annual energy savings standards are laid out. But this bill strikes entire sections (71, 73, 75, 89, etc.) that contain very important definitions and principles that should be retained, even if the future policy moves toward IRP. These include elements like the definition of cost-effectiveness, the requirement that programs be cost-effective, the requirement for independent evaluation of the programs, etc. I've attached a document that briefly describes a number of these elements.

An additional practical problem is the timeline for phasing out Energy Optimization. Due to the length of time the legislative process has taken, the timeline of having the Energy Optimization savings standard end after 2018 now leaves a significant gap before energy efficiency (waste reduction) programs could begin under an IRP scenario. The timeline laid out below illustrates this problem.

Most optimistic timeline

SB 438 bill enacted	June 2016
2 years to file IRP	June 2018
300 days to issue order	March 2019 (longer if changes needed to the filed IRP)
Time for utilities to issue RFPs, hire contractors and get programs operating	December 2019 (at the earliest)

If the intent and expectation is that the new IRP approach would replace the need for Energy Optimization, then this would suggest that the current EO requirement and structure should not be repealed before December 31, 2019.

A Final Word: The Concern with "Mandates" is Misplaced

Given that all of the available data points against the idea of repealing the Energy Optimization policy, one is left to conclude that this is being done because of a philosophical opposition to "mandates". That motivation is misplaced in this case, for several reasons. First, electric utilities are not simple competitive businesses operating in a free market....they are government-sanctioned monopolies, regulated in the public interest. Utilities operate every day under countless state mandates. In fact, I counted over 20 examples of "mandates" of one type or another contained in PA 237 and 238...ranging from the requirement to provide "green pricing" programs; to the requirement to have a "distributed generation" program; to the requirement to prepare and file "integrated resource plans"; to all sorts of requirements relating to "customer choice" of electricity providers. And each of those elements, and many others, include numerous specific detailed requirements. Clearly there is no blanket policy of "no mandates". So there is no defensible reason for singling out 'energy efficiency' (Energy Optimization) as a mandate that must be repealed.

Requiring utilities to provide energy efficiency programs is clearly in the public interest, as it reduces total utility system costs for ratepayers. In the face of literally decades of experience that utilities do not provide significant energy efficiency programs on their own volition, a public policy to establish an energy efficiency standard for utilities is entirely appropriate.

In closing, the data suggest that the Committee should re-think its approach here, and maintain a strong Energy Optimization policy and savings standard. Desirable improvements would be to raise or eliminate the spending cap on this most cost-effective resource, and increase the savings target to 1.5% per year...in line with the Governor's projection for 2025. If you want to *rename* that policy to "Energy Waste Reduction", that would be fine. And if an IRP process is desired, make that an *additional* process that would be *combined* with a strong Energy Optimization standard.

Thank-you very much for your consideration.